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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,306

09/25/2006

John Michael Clarkson

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11377 West Olympic Boulevard
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EXAMINER

RAMDHANIE, BOBBY

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

02/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,306	Applicant(s) CLARKSON ET AL.	
	Examiner BOBBY RAMDHANIE	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14, 24, 25 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 24, 25 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 14, 24, 25, 28, 29, & 30 have been considered but are moot in view of the new ground(s) of rejection. The new rejections are necessitated by Applicants' amendments to the claims.

Response to Amendment

Drawings

2. The drawings were received on 10/23/2008. These drawings are acceptable.

Specification

3. The abstract of the disclosure is objected to because Applicants have disclosed in the Specification that the copolymer blend of ethylene and norbornene is made from Trademark name products – these trademark name products change over time. Percentages or ranges of the components for the copolymers are required for one of ordinary skill to practice the invention. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 14, 24, & 25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Korf et al (US5167929).

7. Applicants' claims are toward a device.

8. Regarding Claims 14, 24, & 25, Korf et al discloses the molded plastics material sample vessel comprising A). A tubular portion which has a maximum external cross sectional width (See Figure 1); B). An internal sample volume of not more than 100 microliters (100 μ L) (See Figure 1, note 100 μ L); wherein C). The tubular portion comprises a tubular external wall with a and wherein the tubular portion: has a truncated conical external surface, the angle between a meridian of the truncated conical external surface and the axis of the cone being in the range of from 0 to 90 degrees, is closed at its narrower end, and is open at its wider end (See Figure 1).

9. Korf et al does not explicitly disclose that the maximum external cross sectional width is 5mm, that the tubular external wall thickness ranges from 0.01 to 2 mm, or that the angle between a meridian of the truncated conical external surface and the axis of the cone being in the range of 0.2 to 8 degrees. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify these dimensions to

Art Unit: 1797

be within the ranges recited since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Additional Disclosures Included: Claim 24: The molded plastics material sample vessel according to claim 14, further comprising a section of frustoconical shape directly or indirectly adjoining the tubular portion, which section increases in external diameter in the direction away from the tubular portion (See Figure 1); and Claim 25: The molded plastics material sample vessel as claimed in claim 14 further comprising a neck portion that includes a cylindrical portion for receiving a closure means (See Figure 1).

10. Claims 28 & 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korf et al of in view of Miyamoto et al (US6331591).

11. Applicants' claims are toward a device.

12. Regarding Claims 28 & 29, Korf et al discloses the molded plastics material sample vessel which comprises A). A tubular portion having an external cross sectional width (See Figure 1); B). An internal sample volume of not more than 100 microliters (See Figure 1), wherein the tubular portion comprises a tubular external wall with a thickness (See Figure 1) and wherein the tubular portion: 1). Has a truncated conical external surface, the angle between a meridian of the truncated conical external surface and the axis of the cone being in the range of from 0-90 degrees (See Figure 1), 2). Is closed at its narrower end (See Figure 1); 3). Is open at its wider end (See Figure 1), wherein C). Having a mean internal cross sectional width of the cavity of the tubular

Art Unit: 1797

portion (See Figure 1); and D). The sample tube further comprises a section of frustoconical shape directly or indirectly adjoining the tubular portion, which section increases in external and internal diameter in the direction away from the tubular portion (See Figure 1).

13. Korf et al does not disclose the range limitations of the above limitations, or that the sample vessel is made of a cyclo-olefin copolymer of ethylene and norbornene. Miyamoto et al discloses cycloolefin copolymer blends that comprise ethylene and norbornene (See Column 3 line 63 to Column 4 line 8). Miyamoto et al also discloses that these copolymer compositions have industrial applications for containers, bottles, cups, and packaging films (See Column 15 lines 62-67). It would have been obvious to one of ordinary skill in the art at the time the invention to modify the sample vessel of Korf et al with the copolymer compositions of Miyamoto et al because according to Miyamoto et al, these copolymers result in excellent impact resistance, which would be important for Korf et al because the reaction vessels would essentially be required to be durable and withstand temperatures exceeding 50°C (See Korf et al; Abstract); It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify these dimensions to be within the ranges recited since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

14. For Claim 29, the combination of Korf et al and Miyamoto et al disclose the molded plastics material sample vessel as claimed in claim 28, except wherein the

Art Unit: 1797

angle between the meridian of the truncated conical external surface and the axis of the cone being in the range of from 1 degree to 3 degrees. Korf et al does however disclose that the angle between the meridian of the truncated conical external surface and the axis of the cone being in the range of from 0-90 degrees. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify these dimensions to be within the ranges recited since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

15. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Korf et al and Miyamoto et al, and in further view of Tice et al (US6432665).

16. Applicants' claims are toward a device.

17. Regarding Claim 30, the combination of Korf et al and Miyamoto et al discloses the molded plastics material sample vessel as claimed in claim 28, wherein the cycloolefin copolymer of ethylene and norbornene (See Rejection to Claim 28 above). The combination does not disclose that the copolymer blend has a melt flow index of at least 20. Miyamoto et al does however disclose that the copolymer blends may be made from the blends sold under the trademark name of Topas. Tice et al discloses reaction vessels which may be made under the trademark name Topas which explicitly discloses Topas-6015, 8007, 5013, and 6017 (note: Applicants have disclosed that Topas 5013 was used in the method of making the device which has the melt flow index property of at least 20). It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 1797

invention was made to modify the combination of Korf et al and Miyamoto et al with the Topas copolymer line because according to Miyamoto et al, preferable COCs are copolymers of a cyclic olefin having a norbornene based structure, preferably norbornene, tetracyclododecene or cyclic olefins having a structure derived from them, and a non-cyclic olefin having a terminal double bond, e.g., an .alpha.-olefin, preferably ethylene or propylene. Among them, norbornene-ethylene, norbornene-propylene, tetracyclo-dodecene-ethylene and tetracyclododecene-propylene copolymers are particularly preferred (See Column 4 lines 1-9).

Telephonic Inquiries

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1797

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY RAMDHANIE whose telephone number is (571)270-3240. The examiner can normally be reached on Mon-Fri 8-5 (Alt Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. R./

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1797